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Indicate the answer choice that best completes the statement or answers the question.

	1	2	3	4	5	6	7	8	9	10
a										
b										
c										
d										
e										

1. A stemplot of a set of data is roughly symmetric, but a quantile plot does not show a straight line. What conclusion can we draw?

a. The data are Normal but not standard Normal.
b. The data are standard Normal.
c. The data are not Normal.
d. The data are Normal.

2. We have a data set where the cases are college students. One of the variables in the data set is "hometown." What type of variable is hometown?

a. Quantitative
b. Categorical
c. Quantitative and categorical
d. None of the above

3. Below is a data set with information on students in a basic statistics class at a local university. How many categorical variables are in this data set?

Student ID	**GPA**	**Hometown**	**Major**
23455	3.1	Chicago	Math
23672	3.2	DC	Statistics
4572	4	Atlanta	Applied Math
89675	2.1	Kansas City	Undeclared
65546	3.2	New York City	Biology
7789	2.8	Raleigh	Biology
90956	2.2	Santa Monica	Statistics
56378	3	Richmond	History
36455	3.8	Dallas	Physics
46456	11.1	Austin	Anthropology

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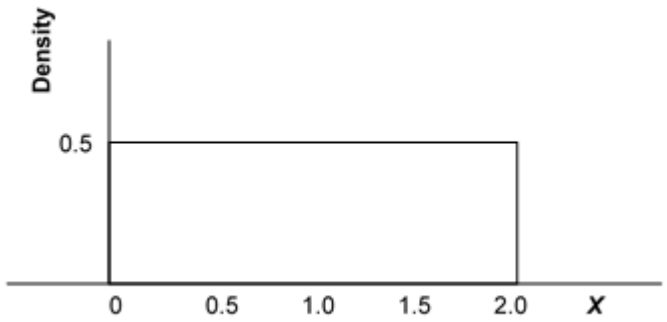
a. none
b. one
c. two
d. three

4. For the density curve below, what percent of the observations lie above 1.5?



a. 25%
b. 50%
c. 75%
d. 80%

5. What method is most useful in comparing two distributions using a stemplot?
a. Splitting the stem
b. Trimming the leaves
c. Back-to-back stemplots
d. None of the above

6. The standard deviation *s* is a useful measure of a characteristic of a distribution of data values. Which of the following statements about *s* is FALSE?
a. The standard deviation measures the spread of the data around the mean.
b. The standard deviation is appropriate as a measure of spread when the mean is chosen as the measure of center.
c. The standard deviation can never be zero.
d. The standard deviation is not resistant; a few outliers can make *s* very large.
e. As the data values become more spread out about their mean, *s* becomes larger.

7. Large data sets with quantitative variables are best displayed using _____.
a. stemplots
b. histograms
c. stemplots and histograms
d. none of the above

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8. A well-known maker of jams and jellies packages its jams in jars labeled "250 milliliters." The process used to fill the jars is known to dispense an amount of jam that is a Normally distributed variable with $\mu = 252$ milliliters and $\sigma = 0.9$ milliliter. What percent of jars will be filled with between 251 milliliters and 254 milliliters?

a. 85.3%
b. 1.3%
c. 14.7%
d. 13.4%
e. 8.5%

9. The World Malaria Report (2008) has information on the number of reported malaria cases from 2005 and 2006 for the 10 countries listed in West Africa. The data are presented in the table below.

Country/area	**2005**	**2006**
Benin	803,462	861,847
Burkina Faso	1,615,695	2,060,867
Côte d'Ivoire	1,280,914	1,253,408
The Gambia	161,698	266,188
Ghana	3,452,969	3,511,452
Liberia	116,681	1,105,272
Mali	962,706	1,022,592
Senegal	1,346,158	1,555,310
Sierra Leone	233,833	160,666
Togo	437,662	566,450

The mean number of malaria cases in 2006 is probably _____.

a. higher than in 2005
b. lower than in 2005
c. exactly the same as in 2005

10. Agricultural fairs often hold competitions for produce grown by local gardeners. The following data are the weights (in pounds) of tomatoes entered into an annual fair in Roland, Manitoba, Canada, in 2007.
2.48 1.52 1.15 1.13 1.00 0.99 0.96 0.94 0.75
The interquartile range (*IQR*) for these data is:

a. a value less than 0.40 pound.
b. a value between 0.50 pound and 0.60 pound.
c. a value between 0.65 pound and 0.75 pound.
d. a value greater than 0.80 pound.

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Answer Key

1. c

2. b

3. d

4. a

5. c

6. c

7. b

8. a

9. a

10. a